

San Francisco Bay Conservation and Development Commission

Shoreline Spaces

**PUBLIC ACCESS DESIGN GUIDELINES
FOR THE SAN FRANCISCO BAY**



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April 2005

San Francisco Bay Conservation and Development Commission

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ABOUT BCDC

The 27-member San Francisco Bay Conservation and Development Commission (BCDC) was created by the California Legislature in 1965 in response to broad public concern over the future of the San Francisco Bay. The Commission is made up of appointees of the California Governor and Legislature, local governments and state and federal agencies. The Commission is charged with:

- Regulating all filling and dredging in the San Francisco Bay.
- Regulating new development within the first 100 feet inland from the Bay shoreline to ensure that maximum feasible public access to the Bay is provided.
- Protecting the Suisun Marsh -- the largest remaining wetland in California.
- Minimizing pressures to fill the Bay by ensuring that the limited amount of shoreline area suitable for high priority water-oriented uses is reserved for ports, water-related industries, water-oriented recreation, airports and wildlife refuges.
- Pursuing an active planning program to study Bay issues so that Commission plans and policies are based upon the best available current information.
- Administering the federal Coastal Zone Management Act within the San Francisco Bay segment of the California coastal zone to ensure that federal activities reflect Commission policies.
- Participating in the regionwide state and federal Long-Term Management Strategy (LTMS) for dredging and dredge material disposal in the San Francisco Bay.
- Participating in California's oil spill prevention and response program.

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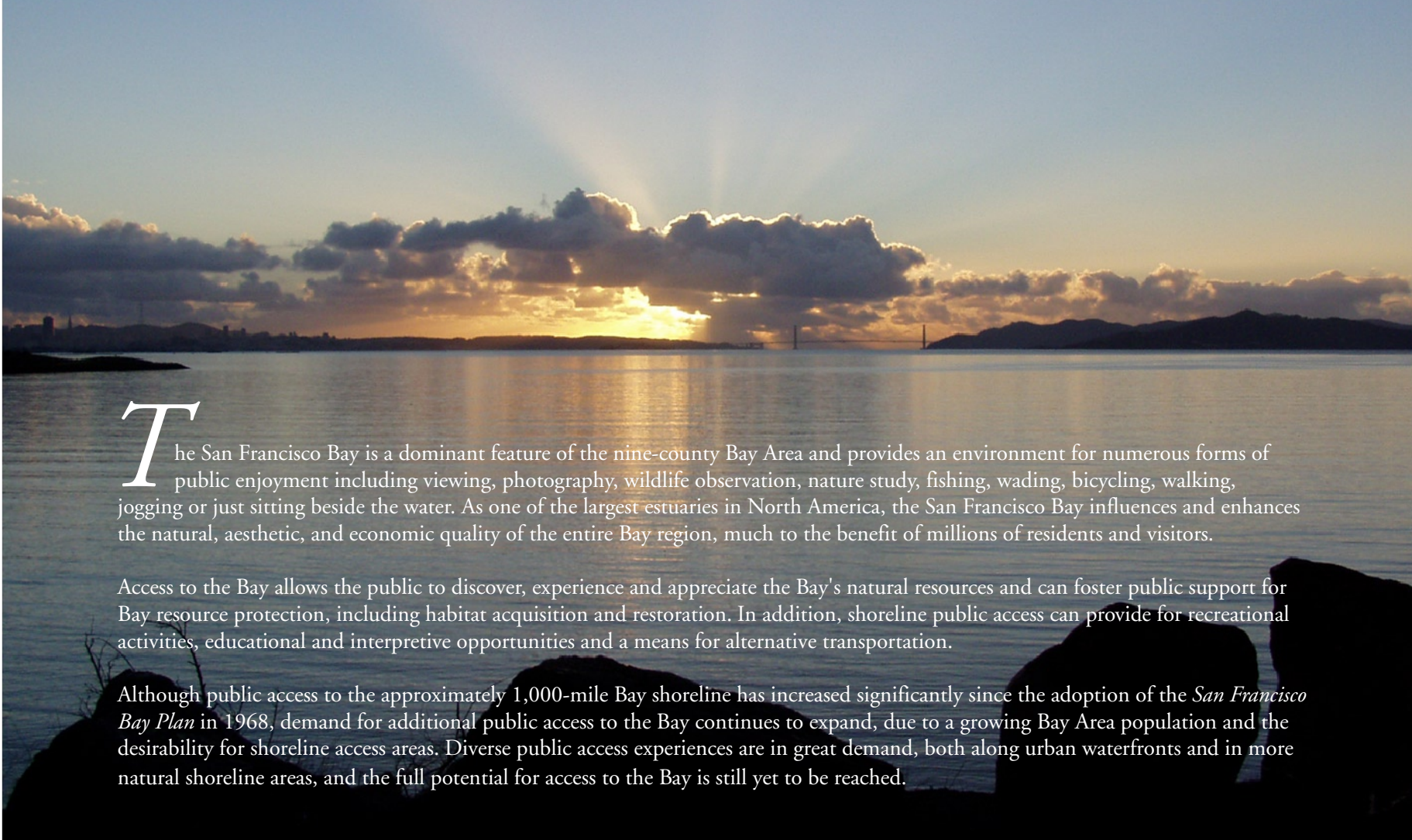
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I. INTRODUCTION

"More often the bay's impact comes unexpectedly. Rounding a corner in the heart of the city, you come upon it suddenly in the distance between nearby houses, blue in the sun...."

Harold Gilliam
author, *San Francisco Bay*



The San Francisco Bay is a dominant feature of the nine-county Bay Area and provides an environment for numerous forms of public enjoyment including viewing, photography, wildlife observation, nature study, fishing, wading, bicycling, walking, jogging or just sitting beside the water. As one of the largest estuaries in North America, the San Francisco Bay influences and enhances the natural, aesthetic, and economic quality of the entire Bay region, much to the benefit of millions of residents and visitors.

Access to the Bay allows the public to discover, experience and appreciate the Bay's natural resources and can foster public support for Bay resource protection, including habitat acquisition and restoration. In addition, shoreline public access can provide for recreational activities, educational and interpretive opportunities and a means for alternative transportation.

Although public access to the approximately 1,000-mile Bay shoreline has increased significantly since the adoption of the *San Francisco Bay Plan* in 1968, demand for additional public access to the Bay continues to expand, due to a growing Bay Area population and the desirability for shoreline access areas. Diverse public access experiences are in great demand, both along urban waterfronts and in more natural shoreline areas, and the full potential for access to the Bay is still yet to be reached.

BCDC JURISDICTION AND AUTHORITY



JURISDICTION. Defined by the McAteer-Petris Act, the area over which the BCDC has jurisdiction can be generally described as: (1) the San Francisco Bay and all areas that are subject to tidal action from the south end of the Bay to the Golden Gate and to the Sacramento River; (2) a 100-foot-wide shoreline band located immediately landward of the edge of the Bay; (3) salt ponds; (4) managed wetlands; and (5) other certain waterways and tributaries to the Bay. Under the McAteer-Petris Act, the Commission must assure that every project requiring Commission approval provides maximum feasible public access, consistent with the proposed project. This standard is more fully described in the *San Francisco Bay Plan* and has been applied specifically in past Commission permit decisions.

LAND USE AUTHORITY. BCDC's authority over the water of the San Francisco Bay relates primarily to Bay fill. As described in the McAteer-Petris Act, Bay fill (solid fill, pile-supported fill, floating fill and cantilevered fill) can be approved by the Commission only for water-oriented uses or for improving the shoreline appearance or public access to the Bay.

Along the Bay shoreline, BCDC's land use authority relates primarily to public access. The Commission bases the approval of a project primarily on whether or not the development provides maximum feasible public access, consistent with the project. In addition, BCDC has designated certain "priority use" areas. These specific areas are needed to support regionally important, water-oriented uses and were designated by the Commission to protect the Bay from further filling for these uses. The priority use areas, depicted in the *San Francisco Bay Plan*, are reserved for ports, water-related industry, water-oriented recreation, airports and wildlife refuges. The Commission and its staff rely on Bay Area local governments to ensure that waterfront land uses promote high quality developments, such as residential and office projects, restaurants and other structures, that take full advantage of their scenic Bayside locations.

INQUIRIES. If there are questions about the Commission's jurisdiction, authority, policies or practices, one should consult the Bay Plan, the McAteer-Petris Act, previously issued permits and the Commission's regulations. BCDC staff are also available to answer questions related to the Commission's jurisdiction and authority.

WHAT IS PUBLIC ACCESS?

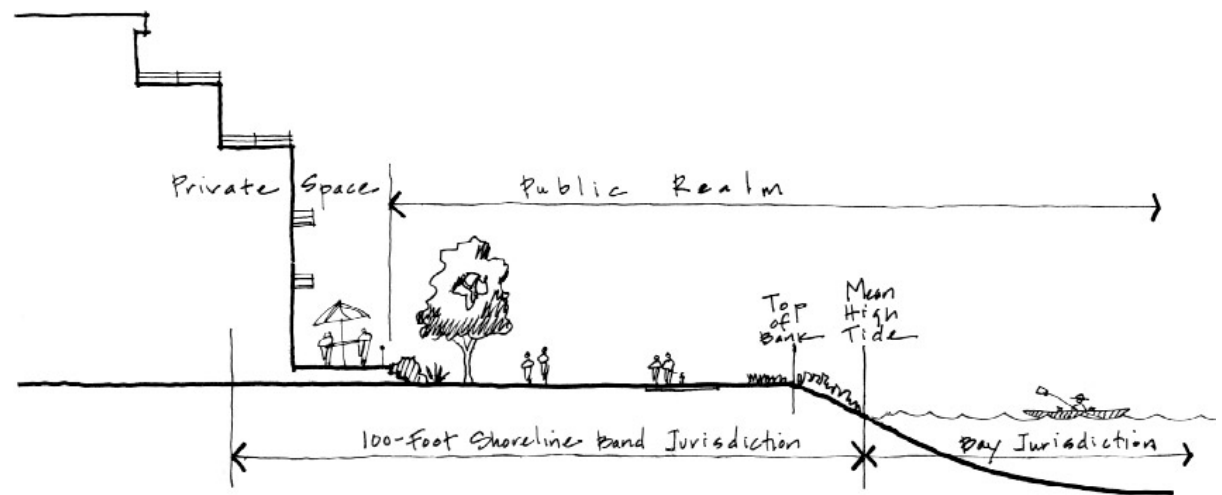
“As defined by BCDC’s law, the McAteer-Petris Act, every proposed development should provide ‘maximum feasible public access, consistent with a proposed project.’”

Public access to and along the shoreline of the Bay is an integral component of development and usually consists of pedestrian, bicycle and other non-motorized forms of movement. It can also allow for other uses such as fishing, picnicking, windsurfing, boating, nature education and other waterfront activities.

Public access is required by the San Francisco Bay Conservation and Development Commission (BCDC) as a condition of approval for most shoreline developments. As defined by BCDC’s law, the McAteer-Petris Act, every proposed development should provide “maximum feasible public access, consistent with a proposed project.” Public access areas should be designed, constructed and maintained to reflect this purpose.

“Public access” includes physical public access to and along the shoreline of the Bay and visual public access (views) to the Bay from other public spaces. Physical improvements may include waterfront promenades, trails, plazas, play areas, overlooks, parking spaces, landscaping, site furnishings and connections from public streets to the water’s edge. Visual access can be achieved through thoughtful site planning and design, including roadway layout, building siting and massing and use of intrinsic opportunities at the site, such as natural grade changes and shoreline variations, to enhance Bay sight lines and views.

Due to the nature of the San Francisco Bay and the numerous types of development that occur along its shoreline, the amount and quality of public access that is “consistent with the project” will likely vary with each development. In projects that cannot provide on-site public access due to safety or use conflicts, including significant adverse effects on wildlife, in-lieu public access near the site may be appropriate. As a condition of approval, public access areas are usually required to be legally dedicated to a public agency as open space or otherwise permanently guaranteed for public use.



WHO IS “THE PUBLIC?”

The space between shoreline development and the Bay and the public corridors leading to the shoreline must be designed to create a safe and enjoyable Bay experience for the visiting public. Furthermore, public access areas must be developed to allow use by the public, free of charge. Of course, customers of waterfront businesses, employees of shoreline office buildings and waterfront residents also visit shoreline access areas and, through their use, enliven and activate public access areas along the Bay. Public access areas should therefore be designed to accommodate both groups of people: those who are shopping, dining, living and working near the waterfront, and those who are visiting the Bay and its shoreline for the simple pleasures that the Bay offers.



China Basin Park, San Francisco

PURPOSE OF THE GUIDELINES

The purpose of this handbook is to provide the San Francisco Bay region with a design resource for development projects along the shoreline of the San Francisco Bay. These guidelines provide suggestions for site planning as well as recommendations for designing and developing attractive and usable public access areas. The guidelines are not legally enforceable standards but are an advisory set of design principles aimed at enhancing shoreline access while providing for the protection of Bay resources, regional livability and local economic prosperity.

The guidelines are general in scope due to the varied conditions of the shoreline and the numerous uses that occur along the Bay. They are applicable to all development projects within BCDC's jurisdiction and are intended to complement the guidelines and design standards of the local municipalities within the region. The Commission, its staff and the Design Review Board may clarify, interpret and apply them as appropriate.

Although the Public Access Design Guidelines are advisory, they have been adopted by the Commission and are based on *San Francisco Bay Plan* policies. The guidelines also reflect past recommendations of BCDC's Design Review Board and formal decisions of the Commission.

WHO WILL USE THE GUIDELINES?

The BCDC Public Access Design Guidelines have been developed for use by:

- **Development Teams** – Developers, land planners, landscape architects, engineers, architects and other members of project teams.
- **The Public**
- **Public Agencies** – City, county, special district, regional and state agencies involved in resource protection, land use planning, transportation and recreation.
- **BCDC Design Review** – The Commission's Design Review Board and staff may refer to the guidelines when considering the siting and design of shoreline public access proposals.

HOW TO USE THESE PUBLIC ACCESS DESIGN GUIDELINES

The three-step process below should help developers and consultants design projects that are consistent with BCDC's laws and policies regarding public access.

1. Consider the General Planning Principles found in Section II.
2. Ensure that every project proposal meets the Seven Public Access Objectives found in Section III.
3. Refer to the Site Specific Public Access Improvements found in Section IV and develop a suite of elements that is consistent with the proposed project.

II. GENERAL PLANNING PRINCIPLES

“The design of public access areas should create a ‘sense of place,’ based on the site’s unique shoreline characteristics, the aesthetic quality of the proposed development and the intensity and nature of the proposed use.”

SITE CONTEXT

Site-specific factors such as historic waterfront features, adjoining land uses, surrounding neighborhoods and the natural configuration of the shoreline help determine the site context for development parcels along the San Francisco Bay.

To maximize views of and connections to the Bay and to inform the appearance and design of a project, each new development should take cues from the site’s own waterfront setting and the surrounding built environment. This is also true for public access that is built along the shoreline.

The design of public access areas should create a “sense of place,” based on the site’s unique shoreline characteristics, the aesthetic quality of the proposed development and the intensity and nature of the proposed use. For example, where one shoreline access area is designed to be experientially complex and include a dynamic range of uses, another might be designed to be simple and quiet. Similarly, shoreline areas with a rich history can provide designers with the opportunity to emphasize and integrate historic waterfront features into their projects. For every development along the Bay, the appearance and design of the proposed project, including public access, should relate directly to the context of the site.

SITE PLANNING

As described on the preceding pages, each project must provide “maximum feasible public access.” Regardless of the proposed land use, every development must maximize views to the Bay from other public spaces and provide physical access to and along the shoreline. How this is accomplished depends, in part, on the opportunities and constraints of the site.

To fully understand the opportunities for maximizing views and public access, a site analysis should be prepared prior to developing schematic designs. Alternative design concepts should then be informed by the site analysis and should follow the guidelines that are described in Section III of this document.



Some shoreline areas, especially where wildlife is present, benefit from simple public access improvements.
Bair Island Ecological Reserve, Redwood City



Urban settings provide opportunities for varied waterfront activities.
San Francisco Ferry Building, San Francisco



Formal promenades can meet the requirements for multi-use, recreational needs.
Rincon Park, San Francisco



Historic shoreline elements offer unique public access design opportunities.
Ferry Point, Richmond



The design of public access areas should create “a sense of place” along the shoreline.
High Street Bridge, Oakland



The design of some shoreline spaces should provide the public with varied and interesting experiences.
Angel Island Ferry, Tiburon



Public shoreline improvements are known to add value to private development projects along the Bay.
Sierra Point, Brisbane

III. THE SEVEN PUBLIC ACCESS OBJECTIVES



Although development proposals vary, all public access provided through the Commission's permit process should be planned, designed, constructed and maintained on the basis of the principles listed below. Whether the development is an office building, a residential subdivision or a commercial venture, the following seven public access objectives will help development teams achieve the goal of providing "maximum feasible public access, consistent with the project."

THE SEVEN PUBLIC ACCESS OBJECTIVES ARE:

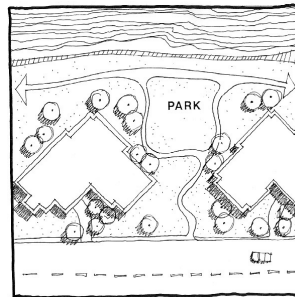
1. Make public access **PUBLIC**
2. Make public access **USABLE**
3. Provide, maintain and enhance **VISUAL ACCESS** to the Bay and shoreline
4. Maintain and enhance the **VISUAL QUALITY** of the Bay, shoreline and adjacent developments
5. Provide **CONNECTIONS** to and **CONTINUITY** along the shoreline
6. Take advantage of the **BAY SETTING**
7. Ensure that public access is **COMPATIBLE WITH WILDLIFE** through siting, design and management strategies

Objective No. 1 – Make Public Access PUBLIC

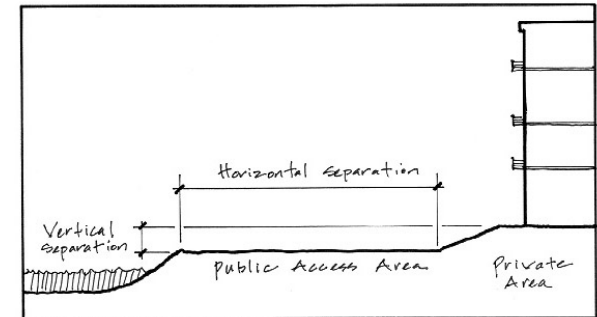
Shoreline areas are most utilized if they provide physical public access to and along the shoreline and visual public access (views) to the Bay from other public spaces. Shoreline areas should provide clear connections to public rights-of-way, be related to the adjacent uses and be designed, built and maintained in a way that indicates their public character. Public access areas must be designed in a manner that “feels public.” Of course, the degree to which a space feels open and inviting is subjective. The goal, therefore, should be to design public access areas in a way that makes the shoreline enjoyable to the greatest number of people.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Developing shoreline access so that the San Francisco Bay Trail or shoreline path is the primary design element.
- Designing public access so that the user is not intimidated nor is the user’s appreciation diminished by large nearby building masses, structures, or incompatible uses.
- Creating delineation between public areas and private development – use fences, planting, elevation and signs where private or conflicting uses are proposed.
- Using site furnishings, such as benches, trash containers and lighting, to provide visual cues that the shoreline space is available for public use.



Public access should feel “public.”



Horizontal and vertical separation can create a clear delineation between public access areas and the private areas of the adjacent development.



The trail in this photo is sufficiently wide to accommodate a variety of users. As the primary shoreline element, it is located so that neither resident nor trail user is affected by the proximity of the other.

The Landing at Jack London Square, Oakland

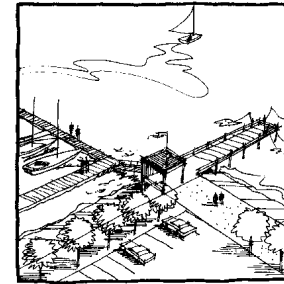
Objective No. 2 – Make Public Access USABLE

Shoreline access areas are most enjoyed when they are designed and built to encourage diverse, Bay-related activities along the shoreline. The varied conditions of the San Francisco Bay shoreline and each site's historical, cultural and natural attributes provide opportunities for creating projects with a “sense of place” and a unique identity. View opportunities, shoreline configuration and access points are factors that determine a site's inherent public access opportunities.

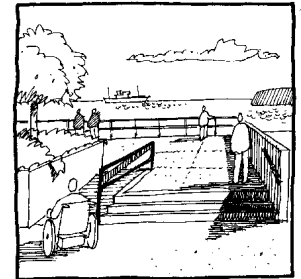
Public access improvements should be designed for a wide range of users. While some shoreline areas are best suited for quiet and contemplative public spaces, others lend themselves to be used for large public gatherings, such as festivals, outdoor markets or exhibits. In remote natural locations, simple trail systems may be all that is needed. Within every project, public access should be designed to respect all visitors' experiences of the Bay. Highly active uses should always be balanced with opportunities for passive activities, such as strolling, viewing and relaxing.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Taking advantage of existing site characteristics and opportunities, such as fishing, viewing, picnicking, swimming or boating.
- Providing opportunities to get close to the water or access the Bay by incorporating facilities such as tidal stairs, ramps or floating docks.
- Maximizing user comfort by designing for the weather and day and night use. Buildings and structures should be sited to create “suntraps” with protection from prevailing winds. Shade structures provide protection from the sun. Lighting helps extend the hours of shoreline use.
- Providing children's play opportunities that have an artistic theme or an educational function.
- Incorporating accessibility improvements into public access areas. For additional information, refer to the U.S. Access Board's Design Guidelines (www.access-board.gov) and the California Building Code.
- Designing public access spaces that are safe and secure.
- Providing interpretation of historical, cultural or natural attributes of the site.
- Providing public parking for convenient access to the Bay.
- Provide basic public amenities, such as trails, benches, play opportunities, trash containers, drinking fountains, lighting and restrooms that are designed for different ages, interests and physical abilities.



Take advantage of site opportunities, such as fishing and boating.



Design for persons with disabilities.



Provide basic public amenities and maximize user comfort with shaded seating or protection from the wind.

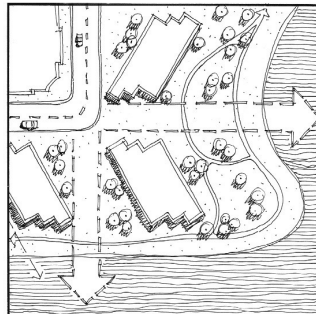
Marina Park, San Leandro

Objective No. 3 – Provide, Maintain and Enhance **VISUAL ACCESS** to the Bay and Shoreline

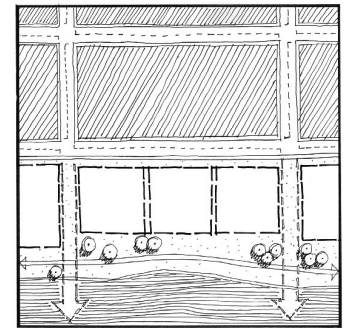
The Bay is a scenic resource that contributes to the enjoyment of daily life in the Bay Area. As a special kind of open space, the Bay acts as a unifying element of the entire Bay region. The wide surface of the Bay and the distant views it affords offer relief from the region's crowded, often chaotic, urban scene and help to create a sense of well-being. Probably the most widely enjoyed "use" of the Bay is simply viewing it from the shoreline, from the water or from a distant viewpoint. For this reason alone, the Bay is a major visitor attraction for the tourist industry and a Bay view can add substantially to the value of a home, office or commercial use.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Locating buildings, structures, parking lots and landscaping of new shoreline projects such that they enhance and dramatize views of the Bay and the shoreline from public thoroughfares and other public spaces.
- Organizing shoreline development to allow Bay views and access between buildings.
- In hilly areas, designing and locating shoreline buildings to allow for upland views down to the Bay and to Bay access areas.
- In hilly areas, employing split-level roads to increase viewing and landscaping potential.
- Designing towers, bridges or other structures as landmarks that suggest the location of the waterfront, even when the Bay itself is not visible.



Plan developments to keep Bay and access areas in view as much as possible, especially where roads change direction.



Take advantage of existing streets and views that lead to the Bay.



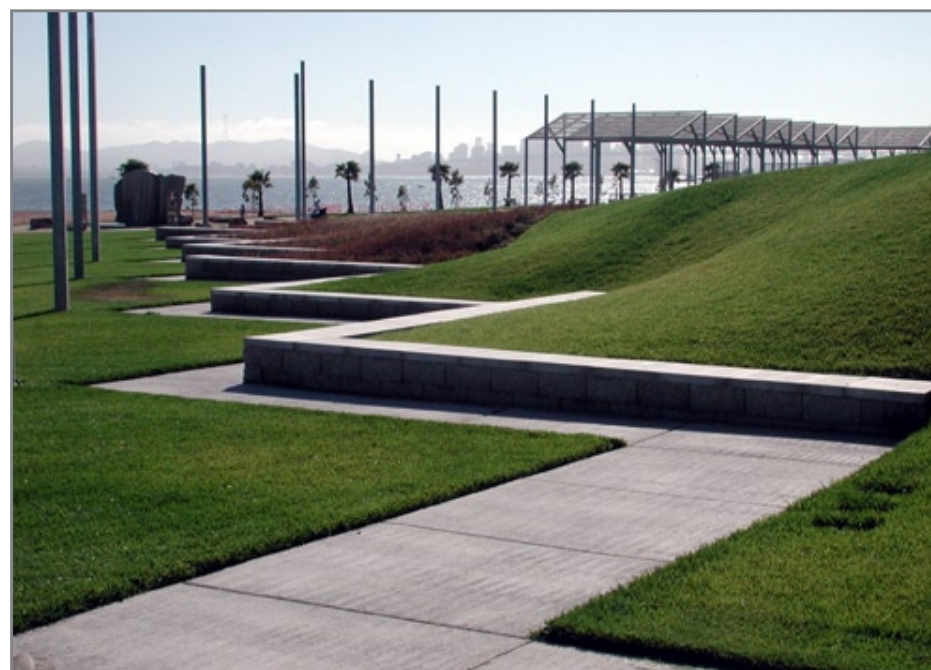
Plan shoreline developments to enhance and dramatize views of the Bay.
Folsom Street, San Francisco

Objective No. 4 – Maintain and Enhance the **VISUAL QUALITY** of the Bay, Shoreline and Adjacent Developments

The visual quality of any shoreline development proposal should relate directly to a set of site-specific factors. Incorporating design principles such as human scale, architectural diversity and varied building massing can lead to well-designed waterfront buildings and shoreline access areas. The design character of public access areas should relate to the scale and intensity of the proposed development. For example, projects in urban areas may include a complex and varied shoreline and dynamic Bay experiences. Conversely, in a rural setting or marsh environment, the serene visual quality of the Bay can be preserved and maintained by focusing on the site's natural characteristics. Other factors can also contribute to the visual quality of the shoreline and adjacent developments. For example, landscaping with native and drought tolerant plants can provide texture and interest to the waterfront. Existing degraded shoreline edges and substandard shoreline erosion protection can be improved as part of new shoreline developments. Unsightly debris that mars the appearance of the shoreline such as plastic bottles, old tires and other refuse should be removed. Over time, the elimination of inappropriate uses and poor quality shoreline conditions and the implementation of well-designed developments will enhance the visual quality of the Bay and its shoreline.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Providing visual interest and architectural variety in massing and height to new buildings along the shoreline.
- Using building footprints to create a diversity of public spaces along the Bay.
- Articulating shoreline building facades with human-scale elements.
- Using forms, materials, colors and textures that are compatible with the Bay and adjacent development.
- Locating service areas, such as garbage facilities and loading docks, away from the shoreline or screen them with suitable fencing or landscaping.
- Utilizing the shoreline for Bay-related land uses as much as possible; uses that do not complement the Bay should be set back from and not impact the shoreline.



The berms and sawtooth seatwall at this park add visual interest to the shoreline and draw the viewer's gaze to the Bay.

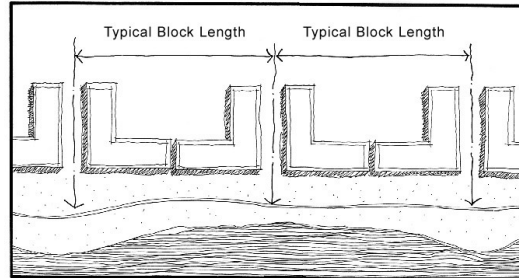
Middle Harbor Shoreline Park, Oakland

Objective No. 5 – Provide **CONNECTIONS** to and **CONTINUITY** Along the Shoreline

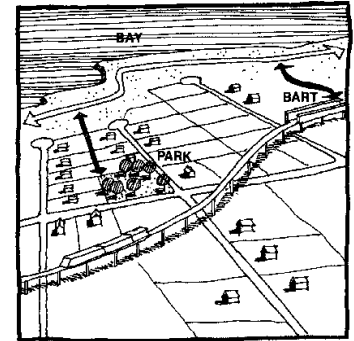
Access areas are utilized most if they provide direct connections to public rights-of-way such as streets and sidewalks, are served by public transit and are connected to adjacent public access or recreation areas. To create a comprehensive system of waterfront access, safe bicycle and pedestrian routes to the shoreline should be planned in collaboration with local governments.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Incorporating the designated Bay Trail route into shoreline projects and providing clear and continuous transitions to adjacent developments.
- Connecting shoreline public access with the local park and open space system, public buildings, shopping districts and other public spaces.
- Coordinating shoreline public access with regional park and open space agencies and local municipalities to provide for connections to trail and public use areas that may be planned for the future.
- Using local public street networks to inform shoreline site design and to extend the public realm to the Bay.
- Providing connections perpendicular to the shoreline at regular intervals (city block length or less) to maximize the opportunities for accessing and viewing the Bay.
- Promoting safe pedestrian and bicycle access to the Bay by calibrating traffic lights at nearby intersections and providing safe, enhanced crosswalks. Conveniently and directly connecting shoreline developments to transit sources such as water taxis, ferries, buses and rail systems.



The distance between view corridors and/or public access opportunities should be about the length of a typical city block.



Connect the shoreline to nearby transit systems and public spaces.



Where development is proposed on long segments of shoreline, public access and views to the Bay should be provided at frequent intervals.

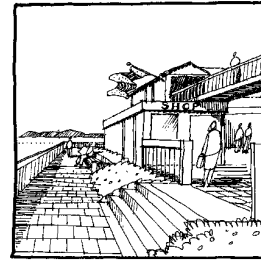
Brooklyn Basin, Oakland

Objective No. 6 – Take Advantage of the BAY SETTING

Development along the shores of the Bay should take maximum advantage of the attractive setting that the Bay provides. Some existing shoreline uses, such as parking lots and industrial structures, neither visually complement the Bay nor lend themselves to waterfront locations. Fortunately, over the past few decades Bay Area communities have rediscovered their waterfronts and most people now know that a revitalized waterfront is a considerable asset. Over time, it is expected that more projects will take full advantage of the scenic Bay setting and that existing inappropriate uses will be phased out or upgraded by normal market forces, public action or a combination of the two.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Orienting the development to Bay views and providing physical connections to the Bay at every opportunity.
- Orienting public access areas and improvements to take advantage of views of opposite shores, landmarks (such as islands and bridges) and adjacent maritime activities such as boat launching, gas docks, ferry landings or other marine-related uses.
- Utilizing the shoreline for Bay-related uses. Uses that do not orient to the Bay should be set well back from the Bay and be sited, designed and managed so as to not impact the shoreline.



Commercial uses that relate to the Bay can enliven and activate adjacent public access areas.



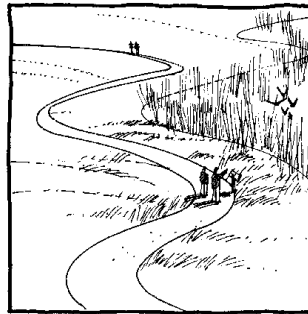
The architecture and siting of this waterfront cafe take advantage of the Bay setting.
Mission Creek Park, San Francisco

Objective No. 7 – Ensure that Public Access is **COMPATIBLE WITH WILDLIFE** through Siting, Design and Management Strategies

In many locations around the Bay, the shoreline edge is a vital zone for wildlife. Access to some wildlife areas allows visitors to discover, experience and appreciate the Bay's natural resources and can foster public support for Bay resource protection. However, in some cases, public access may have adverse effects on wildlife (including flushing, increased stress, interrupted foraging or nest abandonment), and may result in adverse long-term population and species effects. The type and severity of effects, if any, on wildlife depend on many factors, including site planning, the type and number of species present and the intensity and nature of the human activity.

THIS OBJECTIVE MAY BE ACCOMPLISHED BY:

- Preparing a site analysis to generate information on wildlife species and habitats existing at the site and the likely human use of the site.
- Employ appropriate siting, design and management strategies (such as buffers or use restrictions) to reduce or prevent adverse human and wildlife interactions.
- Planning public access in a way that balances the needs of wildlife and people on an area wide scale, where possible.
- Providing visitors with diverse and satisfying public access opportunities to focus activities in designated areas and avoid habitat fragmentation, vegetation trampling and erosion.
- Evaluating wildlife predator access and control in site design.
- Retaining existing marsh and tidal flats and restoring or enhancing wildlife habitat, wherever possible.



Access to wildlife areas can foster support for Bay resource protection.



Any siting and design strategies, such as boardwalks, should be based on a site specific analysis of the wildlife habitat, animal species present and the likely human use of the site.



Public access near wildlife should be planned in a way that balances the needs of wildlife and people.
Palo Alto Baylands, Palo Alto

IV. SITE SPECIFIC PUBLIC ACCESS IMPROVEMENTS

“Public access usually consists of multi-use trails to and along the shoreline of the Bay. It also allows for additional uses along the shoreline that are supported by a suite of physical improvements.”

Public access, as defined by the McAteer-Petris Act and the *San Francisco Bay Plan*, is an integral component of shoreline development. Public access usually consists of multi-use trails to and along the shoreline of the Bay. It also allows for additional uses that are supported by a suite of physical improvements. Below is a comprehensive list of public access improvements, some of which are commonly required as part of the Commission’s permit decisions. All public access improvements must be implemented in a manner that is consistent with the *San Francisco Bay Plan’s* public access policies.

1. Stormwater Management Systems

- Protect the Bay’s water quality by treating stormwater using practical techniques such as infiltration devices, drainage swales and retention areas.
- Reduce urban runoff and nonpoint source pollution by minimizing impervious areas that are directly connected to a storm drain system. Direct runoff from the site’s impervious areas to pervious areas and/or small swales in parking lots and landscaping.
- Consider the potential aesthetic qualities of stormwater systems.
- For more information, refer to the design guidelines provided by the Bay Area Stormwater Management Agencies Association (www.basmaa.org).



Develop multi-functional stormwater systems. This bioswale screens the parking lot from the shoreline trail.
Elmhurst Slough, Oakland

2. Roads and Highways Along the Shoreline

- Plan roads to keep Bay and access areas in view as much as possible, especially where roads change direction.
- Provide buffers between roadways and public access areas, such as planting, low berms or roadside parking, and maintain views to the Bay.
- Provide pedestrian and bicycle facilities adjacent to highway and roadway projects to promote alternative modes of transportation.



Tiburon Shoreline Park, Tiburon



Marina Bay, Richmond

3. Designated Public Access Parking and Staging Areas

- Provide parking for shoreline access areas where appropriate, but keep parking areas reasonably sized, away from the Bay and adequately screened.
- Provide signage to direct motorists to dedicated public access parking spaces.
- Provide staging areas near local and regional waterfront parks to provide convenient access for Bay Area residents and visitors.



Bay West Cove, South San Francisco



Damon Slough, Oakland

4. In-car Bay Viewing

- Provide small bayside parking areas or pull-offs for limited in-car Bay viewing, where compatible with existing roads and adjacent uses.



Shimada Friendship Park, Richmond

5. Pedestrian and Bicycle Bridges

- Use bicycle and pedestrian bridges over waterways and tributaries to close gaps in the Bay Trail.
- Design bicycle and pedestrian bridges in a manner that is compatible with surrounding land uses, habitats and adjacent developments.
- The appropriate width of a bicycle and pedestrian bridge will depend, in part, on the level of use that is likely to occur at the site. However, multi-use bridges are usually at least 10 feet wide.



Ryder Park, San Mateo



San Leandro Bay, Oakland

6. Gathering and Seating Areas

- Provide gathering places, such as plazas, that function as focal areas within larger public access areas.
- Create spaces that provide a variety of user experiences ranging from communal spaces that accommodate larger group activities to quiet areas located away from crowds.
- Provide plenty of seating choices. Although the Bay shoreline setting is often cool and windy, some shaded seating should be provided. In addition to fixed benches and chairs, some seating should be in the form of picnic tables, retaining walls, planter seats, grass berms, steps and moveable chairs.
- Provide elevated places for viewing the Bay.
- Provide children's play opportunities that have an artistic theme or educational function.



Marina Cove, Alameda



Sierra Point, Brisbane



Jack London Square, Oakland



Vincent Park, Richmond



Mission Creek Park, San Francisco



High Street, Oakland

7. Site Furnishings

- Provide site furnishings that are consistent with the site's characteristics and overall project design and are appropriate for anticipated levels of use.
- Provide custom-made site furnishings where they help create a "sense of place".
- Orient seating toward Bay views or vistas of opposite shores or landmarks, such as bridges or towers.
- Provide durable site furnishings to minimize maintenance requirements.
- Provide enough lighting to create a sense of safety, but design to control intensity, glare and spillover.



Mission Creek Park, San Francisco



Mission Creek Park, San Francisco



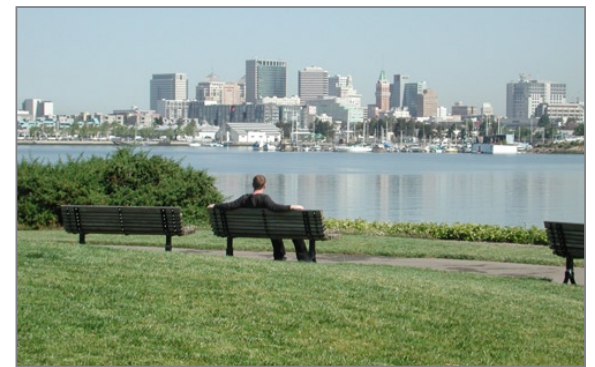
High Street Bridge, Oakland



Middle Harbor Shoreline Park, Oakland



Ferry Building, San Francisco



Alaska Basin, Alameda

8. Signage / Comprehensive Sign Programs

- Identify and advertise public access sites that are not clearly inviting, such as at boat yards, with a standard “Public Shore” sign. For larger developments, a comprehensive sign program should be implemented.
- Provide wayfinding signs to assist shoreline users in traveling to and along the Bay.
- Provide Bay Trail signs, where appropriate.
- Provide signage that informs and educates visitors of unique historical, cultural and natural features.
- Provide management signs in wildlife areas that describe environmental sensitivity and/or any rules and restrictions associated with the management of the wildlife area.
- Do not locate general advertising signage in public access areas.



Bay West Cove, South San Francisco



Oakland Estuary, Oakland



Roberts Landing, San Leandro

9. Avoiding Adverse Effects on Wildlife

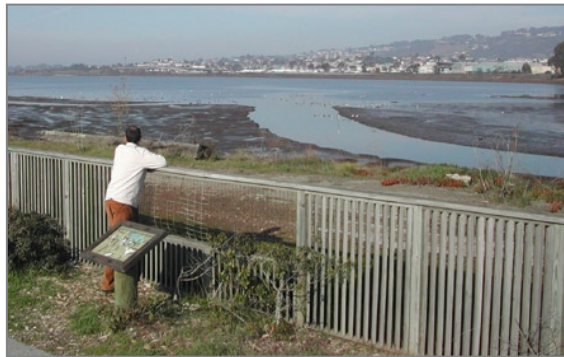
- Use design elements such as varying trail widths, paving materials and site amenities to encourage or discourage specific types of human activities.
- Use durable materials to reduce erosion impacts on adjacent habitats and to keep users from creating alternate access routes.
- Provide spur trails to reduce informal access into and through more sensitive areas.
- Locate parking and staging areas away from sensitive habitat areas.
- Locate night lighting away from sensitive habitat areas.
- Use physical design features to buffer wildlife from human use.
- Manage type and location of public use to reduce adverse effects on wildlife.
- Incorporate educational and interpretive elements.



Bridges and boardwalks can confine public use and provide predictability for wildlife while providing physical and visual access.
Martin Luther King Regional Shoreline, Oakland



Moats can create a physical barrier while still providing views of the Bay and wildlife areas.
Redwood Shores, Redwood City



Fencing can allow some visual access while preventing physical access by both people and pets.
Buchanan Street, Albany



Viewing platforms and overlooks can confine public use while providing visual access.
Elsie Roemer Wildlife Area, Alameda

MAKING INFORMED DESIGN DECISIONS:

The success of any strategy to avoid adverse effects on wildlife will vary from site to site. Part of making informed design decisions is considering specific advantages and disadvantages of each design strategy including:

- The relative effectiveness of a strategy to avoid specific adverse effects on wildlife
- The level of site-specific information needed to use a strategy effectively
- Potential secondary benefits to resources (e.g., erosion control, creation of additional wildlife habitat, restoration of native vegetation)
- Potential adverse impacts to resources (e.g., creation of new predator access opportunities, vegetation shading, habitat fragmentation)
- Potential resulting adverse impacts to visitor experience (e.g., crowding, use conflicts, obstruction of views)
- The relative costs of a strategy, including costs of implementation, construction, maintenance, monitoring and/or enforcement



Vegetation can provide a natural barrier that screens wildlife from human use, controls erosion, improves water quality and serves as wildlife habitat or cover. Vegetative buffers should be constructed landward of the transition zone between the Bay and upland areas, where possible.

North Access Road, South San Francisco



Periodic closures can be implemented to avoid effects on wildlife during sensitive periods, such as breeding seasons.

Roberts Landing, San Leandro



Regulations can restrict visitor behavior (such as prohibiting off-trail use or requiring pet leashes) or certain activities (such as limiting use to non-motorized activities or hunting restrictions).

Elsie Roemer Wildlife Area, Alameda



Interpretive centers, interpretive elements along pathways, docent-led tours and community events can educate visitors about wildlife and appropriate visitor behavior and can help foster public support.

Baylands Nature Interpretive Center, Palo Alto

10. Shoreline Erosion Control

- The type of protective structures used for erosion control should be appropriate for the project site and its erosion conditions.
- Knowledgeable engineering professionals should participate in the design of erosion control projects.
- Riprap revetments should be constructed of properly sized and placed materials that meet sound engineering criteria for durability, density and porosity. The material should be generally spheroid-shaped and placed at a depth of no more than three feet measured perpendicular to the slope.
- Use of dirt, concrete rubble, asphalt concrete, concrete pieces with exposed rebar and large or odd shaped pieces of concrete should be avoided.
- Riprap material should be placed so that a permanent shoreline is established by means of an engineered slope not steeper than a ratio of two (horizontal) to one (vertical).
- Riprap erosion control structures should be created by the placement of a filter layer protected by riprap material of sufficient size to withstand wind and wave conditions at the site.
- Where marsh establishment has a reasonable chance of success, the design of the protective structure should include provisions for non-structural methods, such as establishing marsh and transitional upland vegetation as part of the protective structure.
- In lower wave energy environments, vegetated gabions or other shoreline protection devices that allow plant growth should be used.
- Authorized protective structures should be regularly maintained according to a long-term maintenance program.



Marina Bay, Richmond



Oyster Bay, South San Francisco



Park Street Bridge, Oakland

11. Shoreline Edge Treatments that Provide Closeness to the Water

- Tidal stairs provide visitors with a simple means of getting close to the water. However, algae growth usually occurs below the Mean High Tide line, creating slippery conditions. Therefore, careful consideration should be given to facilities proposed lower than where algae normally occurs.
- Tidal ramps provide a means for access into the water, especially for windsurfers and persons with disabilities.
- With careful placement of appropriately-sized rock and stone, riprap can be designed to include seating elements, providing closeness to the Bay.
- Sandy beaches provide simple and convenient access to the water for human-powered watercraft and swimmers.
- Low-profile floats and docks provide safe launching and landing conditions for human-powered watercraft, such as canoes and kayaks.
- Piers and overlooks provide closeness to the water by enabling users to get out over the water.
- Vertical seawalls and railings provide visitors with the opportunity to stand at the water's edge.



Lucretia M. Edwards Shoreline Park, Richmond



Jay and Barbara Vincent Park, Richmond



Tiburon Shoreline Park, Tiburon



Jack London Square, Oakland



Oyster Point, South San Francisco



Main Street, Benicia

12. Trail Design

- Coordinate with local and regional governments or ongoing projects, such as ABAG's San Francisco Bay Trail Project, to develop trails that meet current standards.
- Provide trail widths ranging from five feet to sixteen feet, depending on the anticipated level and type of use (multi-use, bicycle-only, hiking-only, nature trail). In dense urban areas, an even wider promenade may be needed.
- Design trails to enhance the experience and quality of movement along the shoreline.
- Use paving surface materials, such as asphalt, concrete or stabilized decomposed granite, that are appropriate for the level of use at the site and that relate to adjacent developments.
- Provide pavement markings, such as dashed lines, to direct pedestrian and bicycle traffic.
- Use durable materials to minimize maintenance requirements.
- When planning trails as part of state highway projects, refer to the American Association of State Highway and Transportation Officials' "Guide for the Development of Bicycle Facilities" and "Guide for the Planning, Design and Operation of Pedestrian Facilities."



Sierra Point, Brisbane



Bay Trail, Berkeley



Embarcadero Promenade, San Francisco



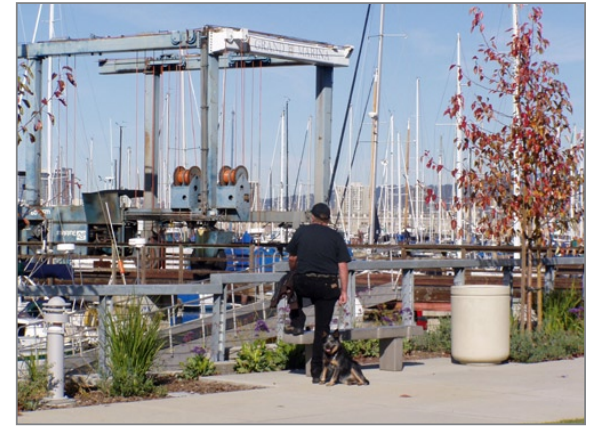
Port Sonoma, Sonoma County

13. Public Access Across Travelifts and Launch Ramps

- Provide public access across boat yards and launch ramps in locations where safety precautions can be implemented.
- At boat launch areas, provide overlooks, belvederes, decks or piers to provide the public with opportunities to observe boating activity.



Marina Bay, Richmond



Grand Marina, Alameda

14. Shoreline Planting

- For specific planting recommendations, refer to BCDC's "Shoreline Plants: A Landscape Guide for the San Francisco Bay."
- Control landscaping to preserve and dramatize Bay views, especially in side yards, at street ends, in parking lots and along public thoroughfares.
- Provide a hierarchy of plant types and sizes within a project that relates to the shoreline, public spaces and adjacent developments.
- Use native plants that provide habitat for wildlife wherever possible and appropriate.



Mission Creek Park, San Francisco



Elmhurst Slough, Oakland

15. Pedestrian and Vehicular Railings

- Design guardrails to allow maximum views, especially on bridges.
- Design guardrails and handrails that relate to the architectural or landscape style of the public access area.



San Francisco Giants Ballpark, San Francisco



Pier One, San Francisco



Fruitvale Bridge, Oakland



Grand Marina, Alameda

16. Fishing Facilities

- Provide fishing opportunities along the shoreline, where feasible.
- Design fishing facilities, such as piers and fish cleaning stations, that accommodate people with disabilities.
- Provide public information about potential fishing hazards, such as boating conflicts or health considerations.



San Antonio Pier, Oakland



Brooklyn Basin, Oakland

17. Point Access at Ports and Water-Related Industrial Areas

- Provide the public with opportunities to safely view port activities and the operations of water-related industry, such as oil refineries and marine construction facilities.



Middle Harbor Shoreline Park, Oakland



Jack London Square, Oakland

18. Interpretive Elements and Public Art

- Provide the public with interpretive elements that add interest to the shoreline and create a varied and rich Bay experience.
- Provide interactive or kinetic site elements that allow people to more fully experience natural, cultural or historical factors of the site and the Bay.
- Provide educational opportunities for public access users through identification of unique natural features and historical or cultural attributes.
- Provide public art that complements the Bay setting, adds visual interest to the shoreline and provides visitors with a sense of discovery.



The design of this interpretive signage was inspired by the bow of the Liberty Ships that were built near this site during World War II.
Marina Bay, Richmond



This shoreline fountain is activated by the tides of San Francisco Bay.
Ryder Park, San Mateo



Some interpretive elements function as public art while providing educational information.
Embarcadero Promenade, San Francisco



Public art often adds visual interest to the shoreline of the Bay.
Rincon Park, San Francisco

V. IN-LIEU PUBLIC ACCESS

“In some cases providing public access as part of a development may be clearly inconsistent with the project because of public safety considerations or significant use conflicts.”

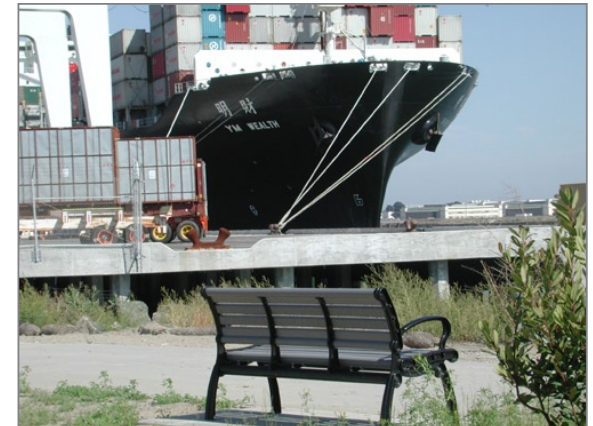
The San Francisco Bay Conservation and Development Commission has been remarkably successful in achieving its mission of maximizing public access to and along the Bay shoreline. Before 1965, only four miles of shoreline were open to public access. Since then, the Commission has required that public access be provided along 65 miles of the Bay shoreline as part of new waterfront projects.

In some cases, however, providing public access as part of a development may be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources. For example, unmanaged or inappropriately located public access may adversely affect wildlife or some port or water-related industrial activities may pose a substantial hazard to public access users. In these cases, in-lieu access at another location, preferably as close to the project as possible, should be provided.

Providing in-lieu public access is not always an easy task. Identifying opportunities for in-lieu public access typically involves collaborating with other property owners, such as non-governmental organizations, regional open space agencies and/or local municipalities. Sometimes it can take a great deal of time and effort to identify shoreline public access opportunities at in-lieu locations that offer significant public benefit. In most cases, BCDC staff can assist applicants with the development of proposals for in-lieu public access. These proposals should usually be identified prior to the issuance of a BCDC permit.



Bay Trail, Burlingame



Middle Harbor Shoreline Park, Oakland

VI. MANAGEMENT ISSUES

“Public access areas and improvements along the shoreline are usually required to be maintained by and at the expense of the BCDC permittee(s).”

As a condition of approval of most shoreline developments, BCDC permits usually contain “special conditions” that ensure that the authorized public access areas will be used properly, managed for the public’s safety and enjoyment and reasonably maintained. The following are some common BCDC requirements for managing public access areas along the shoreline of the Bay:

- **Responsibility for Public Access Areas**

Once a BCDC permit is issued, the permittee is typically responsible for ensuring that the public access area and associated improvements are installed, used and maintained in accordance with the permit. Public access areas are often required to be dedicated to a public agency or otherwise permanently guaranteed, usually through a legal instrument, for the exclusive use by the public.

- **Uses Within Public Access Areas**

Shoreline spaces that are dedicated as public access areas are typically made available exclusively to the public for unrestricted uses, such as walking, bicycling, sitting, viewing, fishing, picnicking, kayaking and windsurfing. If someone wishes to use the public access area for uses other than those specified by the BCDC permit, prior written approval by or on behalf of the Commission is usually required.

- **Reasonable Rules and Restrictions**

Reasonable rules and restrictions may be imposed on the use of the public access areas to correct particular problems that may arise, such as lack of public safety protections or increased vandalism. Rules may include restricting hours of use and delineating appropriate behavior. Such limitations, rules and restrictions typically have to be approved by BCDC upon a finding that the proposed rules would not significantly affect the public nature of the area, would not unduly interfere with reasonable public use of the public access area and would tend to correct a specific problem that has been both identified and substantiated.

- **Maintenance of Public Access Areas**

Public access areas and improvements along the shoreline are required to be maintained by and at the expense of the BCDC permittee(s). Such maintenance usually includes: repairs to all path surfaces; replacement of any landscaping that dies or becomes unkempt; repairs or replacement of any public access amenities such as seating areas, restrooms, drinking fountains, trash containers and lights; periodic cleanup of litter and other materials deposited within the access areas; removal of any hazards in or encroachments into the access areas and assuring that public access signage remains in place and is clearly visible. To reduce on-going maintenance requirements, public access areas should be built with durable materials and using high-quality construction methods.

By drawing attention and providing greater access to the San Francisco Bay, BCDC has played a major role in making the Bay and its shoreline a national recreational treasure. This is demonstrated, in part, by the numerous local, regional, and state and federal parks and recreation areas that have been developed around the Bay since BCDC was established in the 1960s. Today, over 200 miles of the shoreline are open to the public.